

22006

S/105/61/000/001/002/002  
A055/A033

6.7110 (1121, 1524)

AUTHORS: Andreyev, V. S., Burdzeyko, B. P., and Vasil'yev, V. I.

TITLE: Regenerative low frequency divider

PERIODICAL: Elektrosvyaz', no. 1, 1961, 9 - 15

TEXT: In the regenerative low frequency divider described in this article (see Figure 1), RC-amplifiers with double T-shaped bridges are used as selective elements. The new feature of this divider is the way in which the frequency multiplier circuit is connected. As shown in the diagram, the new frequency divider consists of a frequency converter (one half of the first tube), a frequency multiplier (second half of this tube) and two selective RC-amplifiers. In the usual two-tube regenerative frequency dividers, tuning and selectivity are ensured by the insertion of oscillating circuits in the anode circuits of the converter and of the multiplier. But if selective RC-amplifiers are used, it is not advisable to combine the selective device and the converter (or multiplier) into one single stage. To obtain sufficient selectivity and sensitivity, it proved necessary to introduce two separate selective RC-amplifiers. The amplifier following the converter is tuned to frequency  $f$ , and the amplifier follow-

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ing the multiplier to frequency  $(n - 1) f$ ,  $n$  being the division coefficient. The input frequency is thus  $nf$ . Each amplifier is connected to a double T-shaped bridge in the negative feedback circuit. Self-excitation of the amplifiers is avoided by inserting small capacitances between anode and cathode of each amplifier tube, though this caused a certain deterioration of selectivity. The main feature of the frequency multiplier is the existence of an impact circuit, excited by short pulses. The selective RC-amplifier following the multiplier is used as this circuit. The multiplier is operating with bilateral limiting, caused by cutoff and by the effect of grid currents. Its operation is explained in figure 3. As a result of the sinusoidal voltage applied at the multiplier's input (its frequency being  $f$ , and its amplitude considerable), almost trapezoidal impulses (Figure 3a) appear in the anode circuit, the duration and steepness of which are determined by the initial bias and by the amplitude of the input voltage. To the multiplier's anode is connected a differentiating circuit, formed by the capacitance ( $C = 300$  picofarads) and by the parallel-connected input resistance of the bridge and grid leakage resistance ( $R = 1.1$  megohm) of the following tube. Short pulses appearing at the output of this circuit "push" (twice within a period of the low frequency signal) the oscillations generated in the

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amplifier tuned to frequency  $(n - 1) f$ . In the intervals between the pulses, the oscillations are damped. The pulses must be sufficiently short and strong, whereas the interval  $T_1$  between negative and positive impulses should be accurately determined in order to ensure the action of the pulses at the moments when the greatest positive or negative  $(n - 1) f$ -frequency voltages appear at the amplifier grid.  $T_1$  can be controlled by varying the initial bias or the parameters  $R_g$  and  $C_g$  of the multiplier grid circuit. Comparing graphs b, c and d of figure 3, we see that the optimum conditions for a division by an even number are obtained when  $T_1 = T/2$ , whereas division by an odd number is impossible. The setup of figure 1 was analyzed for  $n = 5, 10$  and  $20$ , which required a frequency multiplication by  $4, 9$  and  $19$  respectively. The synchronization band reached  $17, 7.3$  and  $9.3\%$  respectively for  $n = 5, 10$  and  $20$ . The amplitude characteristics ( $U_{outp}/U_{inp}$ ) and the frequency response of the divider are given (for  $n = 5$  and  $n = 20$ ) as well as a short analysis of the circuits. The output range of the divider extends from several times  $10$  kc to  $10$  cycles, and even below. Sensitivity and stability of the divider are quite satisfactory. The synchronization band for great values of  $n$  is wider than that of any other existing frequency divider. There are 10 figures, 1 table and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The reference to English language publication reads as

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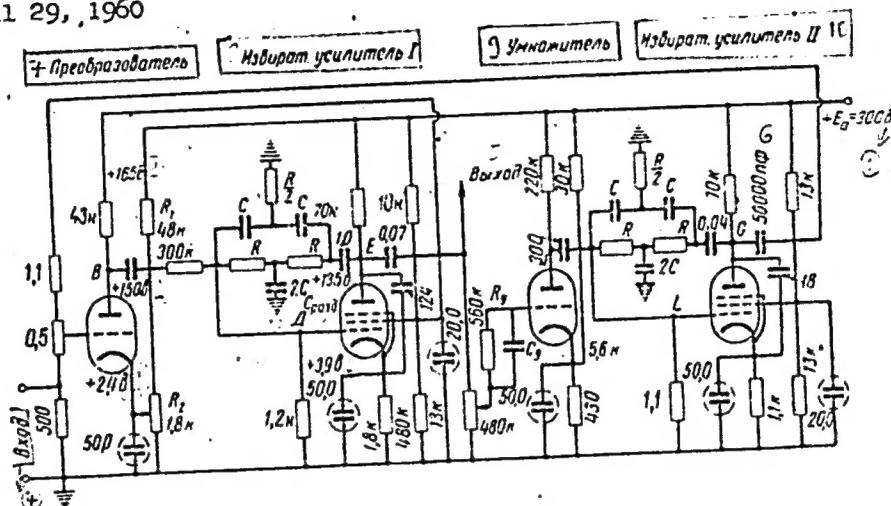
Regenerative low frequency divider

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follows: Schmidt, "Frequency division with phase-shift oscillators", Electronics, v. 23, VI, 1950. X

SUBMITTED: April 29, 1960

Figure 1:



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VASIL'YEV, V.I., [Vasyl'iev, V.I.] (Kiyev)

Chemical water purification in thermal electric power plants as an  
object for differential optimizing control systems. Avtomatyka 8  
no.5:69-74 '63. (MIRA 17:1)

VASIL'YEV, V.I.

Variety of zinciferous Metacinnabarite (guadalcazarite)  
found in the mercury ores of the Gornyy Altai. Dokl. AN  
SSSR 153 no.3:676-678 N '63. (MIRA 17:1)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN  
SSSR. Predstavleno akademikom V.S. Sobolevym.

VASIL'YEV, V.I.

Evaluating the accuracy of calculating welding deformations.  
Trudy LKI no.38:15-26 '62. (MIRA 16:7)

1. Kafedra tekhnologii sudostroyeniya Leningradskogo  
korablestroitel'nogo instituta.  
(Ships--Welding) (Thermal stresses)

VASIL'YEV, Vladimir Ivanovich; TITOVA, N.M., red.izd-va; TURBANOVA,  
N.A., tekhn. red.

[Differential optimizing control systems] Differentsial'-  
nye sistemy ekstremal'nogo regulirovaniia. Kiev, Izd-vo  
AN Ukr.SSR, 1963. 70 p. (MIRA 16:9)  
(Automatic control)



KRESHKOV, A.P.; VASIL'YEV, V.I.

Differential determination of weak bases by the method of spectrophotometric titration in nonaqueous solutions. *Izv.vys.-ucheb.zav.;khim.i khim.tekh.* 6 no.1:24-30 '63. (MIRA 16:6)

1. Moskovskiy khimiko-tekhnologicheskoy institut imeni D.I.Mendeleyeva, kafedra analiticheskoy khimii.  
(Bases (Chemistry)) (Spectrophotometry)

CHURIN, Kh.D., kand. sel'khoz. nauk, dots.; VASIL'YEV, B.M., dots.;  
BELOV, A.I., kand. ekon. nauk; ASHIRYAYEV, Sh.V., dots.;  
TSYPKIN, G.I., kand. sel'khoz. nauk; KAPLINA, G.T., dots.;  
ANDRONOV, I.G., dots.; VASIL'YEV, V.I.; KONDION, A.K.,;  
MAKAROV, A.P., nauchnyy sotr.; ZHIZNEVSKIY, F.V., red.;  
MOSIYASH, S.P., red.; KRINITSKIY, V.A., red.; NAGIBIN, P.,  
tekhn. red.

[Economics of Kazakhstan agriculture] Ekonomika sel'skogo kho-  
ziaistva Kazakhstana. Alma-Ata, Kazsel'khozgiz, 1962. 325 p.  
(Kazakhstan--Agriculture--Economic aspects) (MIRA 16:3)

VASIL'YEV, V.I. (Moskva, ul.Chaplygina,d.1-a,kv.53)

Diagnostic significance of pulmocapillary pressure in mitral stenosis. Grud. khir. 1 no.3:8-13 My-Je '59. (MIRA 15:3)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - prof. A.V. Gulyayev) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni Pirogova.

(CAPILLARIES)

(MITRAL VALVE--DISEASES)

(LUNGS)

VASIL'YEV, V.I., inzh.; BABAKHIN, A.I., inzh.

Experience in the waterproofing subway tunnels. Put' 1 put. khoz.  
8 no.9:28-31 '64.  
(MIRA 17:11)

VASIL'YEV, V.I.

Case of bilateral fracture of the radius in a typical spot.  
V.I. Vasil'ev. Ortop. travm. i protez 19 no.2:73 Mr-Ap '58  
(MIRA 11:5)

1. Iz gosital'noy khirurgicheskoy kliniki pediatricheskogo  
fakul'teta (zav- prov. A.V. Gulyayev) 2-go Moskovskogo med-  
itsinskogo instituta im. N.I. Pirogova.  
(RADIUS--FRACTURE)

VASIL'YEV, V.I.

Teaching mechanical drawing. Politekh.obuch.no.2:93 F '59.  
(MIRA 12:3)

1. Srednyaya shkola pos. Vysokogo, g. Khar'kov.  
(Mechanical drawing--Instruction)

LUBENETS, V.D., kand.tekhn.nauk, dots.; FROLOV, Ye.S., kand.tekhn.nauk;  
VASIL'YEV, V.I., inzh.; VLASOV, V.M., inzh.; ZAKHAROV, B.D., inzh.

Investigating the performance of the VN-120 vacuum-pump. Izv. vys.  
ûcheb.zav.; mashinostr. no.4:166-171 '59. (MIRA 13:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche im. Baumana.  
(Vacuum pumps)

VASIL'YEV, V.I. [Vasyl'iev, V.I.]

Results of the testing of sugar beet pilers. Khar.prom. no.3:65-  
67 J1-S '62. (MIPA 15:8)

1. TsINTs.

(Sugar beets—Harvesting)  
(Ukraine—Agricultural machinery—Testing)



VASIL'YEV, V.I.

NOVIKOV, V.A.; KICHIGIN, N.M.; PECHENYY, Kh.D.; VASIL'YEV, V.I.

Results of the use of an imported beet piler at the Salivonkovskii  
Sugar Factory. Sakh. prom. 32 no.1:45-53 Ja '58. (MIRA 11:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sakharnoy promysh-  
lennosti.

(Sugar industry--Equipment and supplies)  
(Loading and unloading)

MAREYEV, Yu.S., dots.: VASIL'YEV, V.I.

Diagnosis of mitral stenosis in the light of surgical treatment.  
Khirurgiya 35 no.10:12-21 0 '59. (MIRA 12:12)

1. Iz gosspital'noy khirurgicheskoy kliniki (zav. - prof. A.V. Gulyayev)  
pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta  
im. N.I. Pirogova.  
(MITRAL STENOSIS surgery)

VASIL'YEV, V. I.

Card Med Sci - (diss) "Sounding of the heart in mitral stenosis."  
Moscow, 1961. 14 pp; (Ministry of Public Health USSR, Central  
Inst for Advanced Training of Physicians); 250 copies; price  
not given; (KL, 6-61 sup, 236)

VASIL'YEV, V.I., PASTUKHOV, N.A. (Moskva)

Complications in cardiac catheterization in patients with  
mitral stenosis. Klin.med. no.7:102-106 '61. (MIRA 14:8)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - prof. A.V.  
Gulyayev) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo  
instituta imeni N.I. Pirogova.  
(MITRAL VALVE—DISEASES) (CARDIAC CATHETERIZATION)

Vasilyev, V.I.

BLUMBERG, Ye.A.; VASIL'YEV, V.I.; EMANUEL', N.M.

Effect of hydrocarbon additions on the concentration limits of  
flame spreading in gas mixtures containing hydrogen. Izv. AN SSSR.  
Otd. khim. nauk no.10:1172-1180 O '57. (MIRA 11:3)

1. Institut khimicheskoy fiziki AN SSSR.  
(Combustion) (Hydrocarbons) (Inhibition (Chemistry))

VASIL'YEV, V.I. [Vasyl'iev, V.I.] (Kiyev)

Study of steady-state and dynamic modes of differential optimizing  
systems. Avtomatyka 7 no.5:27-34 '62. (MIRA 15:11)  
(Automatic control)

VASIL'YEV, V.I. [Vasyl'iev, V.I.] (iyev)

Comperative study of methods for displacing the working point from the extremum and keeping the controlled object at a given slope of the characteristic. Avtomatyka no.5:20-31 '61. (MIRA 14:10)  
(Automatic control)

KOROTZOV, Sergey Sergeyevich, author geol.-engineer. rank; V.I. ...  
V.I., red.

[Materials on regional soil science] Materialy po regional'nomu gruntovedeniyu. Moskva, Izd-vo Mosk. univ., 1964. 152 p. (NIKI 1964)

1. Kafedra gruntovedeniya i inzhenernoy geologii Mosk. gos. universiteta (for Korotzov).



L 25690-48

SOURCE: IVUZ. Mashinostroyeniye, no. 10, 1964, 119-132

TOPIC TAGS: vacuum pump, pump design, pump operation, rotary pump, two rotor pump, internal compression, gas distribution, pressure valve

ABSTRACT: The authors studied a twin-rotor vacuum pump from the points of view of the phases of gas distribution, the limits of indicative strength, and the forces acting on the rotors. The pump is illustrated in Fig. 1 of the Enclosure. The basic definitions of the system's parameters were made in each case, and descriptive functions were set up. Since, in general, there were 3 variables, one of them a construction variable, each variable was plotted as a function of the other for varying values of the construction parameter. A rotary pump with pressure valves produces a significantly lower pressure than a pump without valves. The

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pressure and with decreasing  $m$ , this being a construction parameter reflecting a decrease in radius. Therefore, pressure values increase the economy of operation of a vacuum pump. For  $m \leq 0.721$  the indicative pressure curves show a maxi-

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VASIL'YEV, V.I.

29210


S/102/61/000/005/002/005  
D274/D302

26.2/95

AUTHOR: Vasyl'yev, V.I. (Kyyiv)

TITLE: Comparative study of methods of keeping the operating point at a distance from the extremum and the controlled plant at a given slope of the characteristic

PERIODICAL: Avtomatyka, no. 5, 1961, 20 - 30

TEXT: In certain control systems (e.g. in the chemical industry and in gas-turbine transport devices) it is required that the system should operate near the extremum and not at the extremum itself. A more general (and more frequent) requirement is to keep the controlled object at a given slope of the characteristic, (e.g. in engines of river craft). The methods used to meet these requirements are classified as follows: 1) Methods which provide for a constant displacement from the extremum; 2) Which keep the operating point at a given slope; 3) Which provide for a displacement from the extremum, depending on the value of the controlled variable; 4) Which provide for the required displacement without neces- 

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Comparative study of methods ...

situating testing (search) oscillations. It is assumed that the plant (process) characteristics are approximated by a parabola and that the controllers are ideal. In order to ascertain the influence of feedback and constant displacements on the position of the operating point, several types of extremum controllers are considered. a) Extremum controller of sustained-oscillations type: The steady-state equations of such a system are listed in a table. It is noted that the steady-state error is a measure of the shift of the operating point from the extremum. In some cases the shift of the operating point from the extremum can be obtained by simulating the controlled object. The model should possess all the characteristics of the original, except its inertia. The characteristic curve of the model is similar to that of the original except for a shift of magnitude  $\Delta M$  on the M-axis (M being the controller signal). Hence the shift in the position of the operating point depends on the sign and magnitude of  $\Delta M$ . In order to keep the operating point at a certain distance from the extremum, an ordinary differential system can be used. Such a system has the advantage of no testing oscillations. Another method of shifting the operat-

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Comparative study of methods ...

ing point consists in a rotation of coordinate axes. Thereby, the position of the point will depend on the magnitude and sign of the angle of rotation. b) Extremum controllers with modulating signals: Sinusoidal oscillations are applied to the object input. It is found that in such a system the operating point can be shifted if the feedback and constant displacements operate after the low-frequency filter. A table shows the steady-state characteristics of the system and a figure -- its block diagram. c) Step systems with integrating input: In order to ensure a shift (of the operating point) of given magnitude and sign, it is necessary to preserve either the inequality  $T_1 < T_2$  or  $T_1 > T_2$  ( $T_1$  and  $T_2$  denoting the periods of control), if  $T_1 \neq T_2$ . In the references, the operation of the system near the extremum is ensured by effecting a displacement in the comparator. Simulation can be used in step systems too. d) Differential systems: The method consists in applying the extremum measure  $\Phi$  to two amplifiers with different gain; thereby, a constant displacement is applied to one of the amplifiers. This method is set forth in detail in the references. Conclusions: If the

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shift relates to objects with constant characteristic ( $a = \text{const}$ ),  $a$  being small, it is convenient to either apply a constant displacement to the amplifier or to use negative feedback. With large  $a$ , these methods are inefficient. In this case it is convenient to use models. If the operating point has to be kept at a certain slope, either a controller with modulation or the Quarry controller should be used. The latter should also be used if the operating point has to be kept in a certain neighborhood of the extremum, without fixing its position accurately. There are 9 figures, 4 tables and 10 references: 9 Soviet-bloc and 1 non-Soviet-bloc (in translation).

SUBMITTED: April 15, 1961

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ACCESSION NR: AP5011 14

TR 0146 '65 004 002 0056 0162

AUTHOR: Vasil'yev, V.I.

TITLE: Structure of coding and decoding devices for use with non-binary codes in  
telemetry 8

SOURCE: IVUZ. Prihorostroyeniye, v. 8, no. 2, 1965, 56-62

TOPIC TAGS: code telemetry, telemetry, coding device, decoding device, high base  
code, data transmission, nonbinary code 8

ABSTRACT: In the transmission of metering information over an assigned communication channel, the problem of matching the speed of transmission of the information with the carrying capacity of the channel is solved by means of codes. Readings of a continuous time function can be transmitted by means of codes using different bases for the system of counting. Modern code telemetry systems use binary and binary-decimal codes with a number of code transitions  $k = 1 \dots 2$ , with their structure entirely determined in this way. In order to form the structural systems of coding and decoding devices for codes of higher orders, however, it is necessary to assign an algorithm for the connection of elementary cells, each of which has to stable

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states and two different outputs. Principles are given in the article for the construction of coding and decoding devices for telemetry code systems to realize codes with a

numbered formulas. Various other structural schemes are given. 15 refs.

numbered formulas.

ASSOCIATION: Leningradskiy Elektromekhanicheskiy Institut im. V. I. Ul'yanova  
(Leningrad Electrical Engineering Institute)

SUBMITTED: 24Sep64

ENCL: 00

SUB CODE: DP

NO REF SOV: 002

OTHER: 000

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VASIL'YEV, V.I., inzh.; FOMIN, V.S.

Experience in simultaneous assembling of structural  
elements and equipment during the construction of a sugar  
plant. Prom. stroi. 41 no.4:25-28 Ap '64. (MIRA 17:9)

BRAGIN, B.N., inzh.; VASIL'YEV, V.I., inzh.; ROZHN OV, A.I., inzh.

Some problems in the development of peat briquet production.  
Torf. prom. 40 no.4:30-31 '63. (MIRA 16:10)

1. Moskovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta torfyanoy promyshlennosti.  
(Peat industry) (Briquets (Fuel))

KRESHKOV, A.P.; VASIL'YEV, V.I.

Differentiated determination of weak bases by the method of spectrophotometric titration in nonaqueous solutions. Zhur.anal.khim. 17  
no.8:908-911 N '62. (MIRA 15:12)

1. Mandeleev Chemico-Technological Institute.  
(Bases (Chemistry)) (Spectrophotometry)

VASIL'YEV, V.I.

Flange for the installation of heat signals on power transformers  
in traction substations. Pat. predl. na ger. elektrotirazh. soor.  
52 '64. (MIRA 1964)

1. Energoslužba Tramvayno-trolleybusnogo upravleniya Leningrada.

KRESHKOV, A.P.; VASIL'YEV, V.I.

Spectrophotometric titration of nitro derivatives of amines in  
nonaqueous solvents. Zav. lab. 31 no.1:30-32 '65.

(MIRA 18:3)

1. Moskovskiy khimiko-tekhnologicheskij institut imeni Mendeleyeva.

VASIL'YEV, V.I.

Gray ores as a source of secondary cinnabar in the Gorny Altai.  
Dokl. AN SSSR 162 no.4:901-904 Je '65. (MIRA 18:4)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.  
Submitted January 8, 1965.

TUAYEV, D.G.; VASIL'YEV, V.I.

Bearded titmouse in Azerbaijan. Ornitologiya no.7:492-494 '65.  
(MIRA 18:10)

VASIL'YEV, V.I.

Spongy and dendritic cinnabar in ores of the Aktash deposit and conditions governing its formation. Geol.i geofiz. no.2:77-86 '62.  
(MIRA 15:4)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,  
Novosibirsk.

(Cinnabar)



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ACCESSION NR: AP4048290

AUTHOR: Vasil'yev, V. I.

TITLE: Enhancing the efficiency of information transmission in coded telemetry systems

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 5, 1964, 60-66

TOPIC TAGS: telemeter system, information transmission

**ABSTRACT:** In terms of the relative rate of info transmission  $\beta = R_m/R_2$  (where  $R_m$  is the transmission rate with a code base  $m$  and  $R_2$  is the binary-code rate), the efficiency of info transmission is evaluated for various codes and with low-to-medium pulsed noise in the channel. It is assumed that distributors of the telemeter transmitter and receiver are synchronous and cophasal, and that the sync info is transmitted without distortion. All-combination codes and error-detecting codes under low-noise conditions, as well as positional error-correcting

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codes under medium-noise conditions, are considered. It is inferred that although higher-than-binary codes are liable to fortuitious pulsed noise during the basic transmission time, their info-transmission rate is much higher, which is particularly important in the case of a large number of telemetering channels. Orig. art. has: 3 figures, 27 formulas, and 1 table.

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut im. V. I. Lenina  
(Leningrad Electrotechnical Institute)

SUBMITTED: 23Mar64

ENCL: 00

SUB CODE: DP

NO REF SOV: 003

OTHER: 000

Card 2/2

VASIL'YEV, V.I. [Vasyl'iev, V.I.] (Kiyev); SVETAL'SKIY, B.K. [Svietal's'kyl,  
B.K.] (Kiyev)

Accuracy of predicting systems. Avtomatyka 10 no.4:21-30 '65.  
(MIRA 18:10)

VASIL'YEV, V.I.

Structure of coding and decoding devices used for the realization  
of nonbinary codes in telemetering. Izv. vys. ucheb. zav.; prib.  
8 no.2:56-62 '65. (MIRA 18:5)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova  
(Lenina). Rekomendovana kafedroy avtomatiki i telemekhaniki.

LUBENETS, V.D., kand. tekhn. nauk, dotsent; Vasil' YUL. V. 1., 1964.

Results of the test of a rotary pump in a series  
internal compression. Izv. vys. shkol. 247; 1964, no. 2;  
110-114 '64. (1964, 7:12)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni I.I.  
Baumana.

ACCESSION NR: AP4041993

S/0057/64/034/007/1191/1198

AUTHOR: Aretov, G.N.; Vasil'yev, V.I.; Komel'kov, V.S.; Pergament, M.I.; Tserovitinov, S.S.

TITLE: The structure of plasma bursts from a coaxial plasma gun

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.7, 1964, 1191-1198

TOPIC TAGS: plasma, plasmoid, plasma gun, plasma diagnostics

ABSTRACT: The plasma bursts ejected by a coaxial plasma gun were examined with a battery of diagnostic devices, and the results are presented and discussed in some detail. The plasma gun was similar to that described by J. Marshall (Phys. of Fluids 3, 134, 1960) and employed electrodes 3.2 and 7.0 cm in diameter and 31 cm long. Deuterium was admitted through openings in the inner electrode located 17 cm from the output end of the gun. The gun was powered by a 50 microfarad capacitor bank charged in most of the experiments to 5 kV. The inductance of the system was 40 cm, the oscillation period was 11.4 microsec, and the peak current was 110 kA. The plasmas were observed in a 10 cm diameter 80 cm long glass drift tube. The energy distribution, both transverse and longitudinal, was measured with calorimeters. The thermal

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probe for measuring the longitudinal energy distribution employed a 6 micron thick platinum foil. The distortion of a local 100 to 200 Oe magnetic field by the passage of the plasma was observed, and in other experiments the longitudinal magnetic field of the plasma was recorded in the absence of external fields. The conductivity was estimated from the rate of diffusion into the plasma of a longitudinal magnetic field filling the drift tube. The plasma was probed with 4 mm microwaves. The total radiation in the visible and near ultraviolet was recorded, and the time variation of the intensity of separate spectrum lines was observed. High speed photographs were made at the rate of  $10^6$  frames per second. These photographs were made both with the general radiation and with  $D_\beta$  radiation. The plasmoids were found to consist of three distinct portions which became spatially separated during the drift because of their different velocities. The most rapid portion (velocity up to  $3 \times 10^7$  cm/sec), in which the particle density reached  $2 \times 10^{15}$  cm $^{-3}$  and the electron temperature reached 6 eV, was non-luminous and consisted of pure almost completely ionized deuterium. Following the pure deuterium region was a less dense less rapid impurity zone in which line of carbon and copper were observed. Finally came a slow or ( $6 \times 10^6$  cm/sec), dense, intensely luminous region containing considerable un-ionized gas. The charged particle density in this region was  $5 \times 10^{15}$  cm $^{-3}$ . "The

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ACCESSION: AP4041993

authors express their gratitude to Yu.V.Skvortsov, for valuable discussions, to G. I.Yevstratov, F.Ya.Nikolayov, V.V.Somiglazov, P.T.Shevtsov and A.I.Yaroslavskiy who participated in the experiment, and also to T.I.Spokolova and V.D.Strizhanova for assistance in the presentation of the results." Orig.art.has: 7 figures.

ASSOCIATION: none

SUBMITTED: 31Jul63

ENCL: 00

SUB CODE: ME

NR REF SOV: 006

OTHER: 003

3/3  
Card



ANDREYEV, V.S.; BURDZEYKO, B.P.; VASIL'YEV, V.I.

Regenerative low-frequency divider. Elektrosvaiz' 15 no.1:9-15 Ja '61.  
(MIRA 14:3)

(Frequency changers)

VASIL'YEV, V I

- Reports presented at the 1st All-Union Conference on Ionization Phenomena in Gaseous Media, 28 August - 1 September 1961, Moscow, U.S.S.R.
- a. G. A. Podolskaya, A. N. Podolsky, V. P. Podolsky and V. I. Vasil'yev.  
"Investigation of a Pulse Discharge in a Hollow Cylindrical Gas Discharge"
  - b. B. G. Podolsky and G. M. Podolsky.  
"Energy Measurements of Fast Electrons Emitted During a Normal Pulse Discharge"
  - c. A. B. Podolsky, A. N. Podolsky and G. M. Podolsky.  
"On the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - d. V. I. Vasil'yev, N. N. Podolsky.  
"On the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - e. S. G. Podolsky, A. N. Podolsky, A. V. Podolsky, G. M. Podolsky, G. L. Podolsky.  
"On the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - f. V. I. Vasil'yev, N. N. Podolsky, V. N. Podolsky and S. G. Podolsky.  
"On the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - g. N. Podolsky.  
"A Generalized Formulation of the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - h. N. N. Podolsky, V. I. Vasil'yev and G. M. Podolsky.  
"Molecular Hydrogen Ionization by Cathode Rays"
  - i. I. P. Podolsky, G. M. Podolsky.  
"Ionization of Gases by Cathode Rays"
  - j. P. N. Podolsky, I. N. Podolsky.  
"The Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"
  - k. A. L. Podolsky, V. I. Vasil'yev, N. N. Podolsky and G. M. Podolsky.  
"Investigation of an Ionization Phenomenon in a Hollow Cylindrical Discharge"
  - l. V. I. Vasil'yev.  
"On the Problem of Calculating the Ionization of the Cathode Region in a Hollow Cylindrical Discharge"



L 46324-66 ENT(1) IJP(c) AT

SOURCE CODE: UR/3136/65/000/M16/0001/0015

ACC NR: AT6015887

AUTHOR: Vasil'yev, V. I.; Komel'kov, V. S.; Tserevitinov, S. S.

ORG: Institute of Atomic Energy im. I. V. Kurchatov (Institut atomnoy energii)

TITLE: Longitudinal motion of plasmoids in magnetic fields

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-1016, 1965. Prokhozheniye plazmennyykh sgustkov cherez prodol'nyye magnitnyye polya, 1-15

TOPIC TAGS: plasmoid, pulsed magnetic field, plasma gun, electron temperature, ion temperature, plasma density, deuterium ~~plasma~~

ABSTRACT: The structure of deuterium plasma generated in a coaxial gun and injected longitudinally into a pulsed magnetic field is studied with the aid of thermal and diagnostic probes, a mass spectrograph and a monochromator. These probes are used to determine the velocity of the plasma, the sum of the electron and ion temperatures, spectroscopic diagnostics and particle energy distribution. In addition, 4 mm microwave fields of 15 kG are sufficient to stop plasma of up to  $2 \cdot 10^{15} \text{ cm}^{-3}$  density moving with a velocity of  $2 \cdot 10^7 \text{ cm/sec}$ . On the basis of the experimental events, the equipment was programmed to sever the tail-end of the plasma which carries most of the impurities; this resulted in the production of plasmoids of high purity and relatively high density. Some limitation on the rate of rise of the pulsed magnetic field was required.

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L 46324-66

ACC NR: AT6015887

ed to prevent wall breakdowns and this increased the impurity content of the plasma.  
The experimental results were found to be in good agreement with theoretical estimates.  
Orig. art. has: 4 figures, 1 table.

SUB CODE: 20/

SUBM DATE: none/

ORIG REF: 010/

OTH REF: 006

Card 2/2 fv

VASIL'YEV, V.K.; LAZAREV, R.B.

Oscillographic registration and measurement of the  
hysteresis loops of small ferromagnetic cores. Trudy MEI  
no.49:68-84 '63. (MIRA 17:3)

VASIL'YEV, Vladimir Konstantinovich; SERDYUKOV, S.A., redaktor; DVORAKOV-  
SKAYA, A.A., tekhnicheskii redaktor

[Theory of ship turbines] Teorifa sudovykh turbin. Leningrad, Gos.  
soiuznoe izd-vo sudostroitel'noi promysh., 1955. 485 p. (MIRA 9:3)  
(Turbines)

KURZON, Ananly Grigor'yevich; VASIL'YEV, V.K., redaktor; OSVENSKAYA, A.A.,  
redaktor; FRUMKIN, P.S., ~~tekhnicheskii~~ redaktor

[Steam turbine installations for ships; heating layout] Sudovye  
paroturbinnye ustanovki; teplovye skhemy. Leningrad, Gos.soluzn.a  
izd-vo sudostroitel. promyshl., 1955. 399 p. (MLRA 9:3)  
(Steam turbines)



KURZON, Ananiy Griger'yevich, doktor tekhn.nauk, prof.; VASIL'YEV, V.K., prof.,  
otv. red.; OSVENSKAYA, A.A., red.; KONTOROVICH, A.I., tekhn. red.

[Marine steam and gas turbines; designs] Sudevye parevye i gazevye  
turbiny; konstruktsii. Leningrad, Gos. soizuznee izd-vo sudostreit.  
promyshl. Vol. 1. [Turbine units; turbines] Turbogregaty; Turbiny.  
1958. 303 p. (MIRA 11:12)

(Marine engines)  
(Turbines)

VASIL'YEV, Vladimir Konstantinovich; SANTALOV, Sergey Andreyevich;  
SKRDYUKOV, S.A., nauchnyy red.; SHAURAK, Ye.N., red.;  
KONTOROVICH, A.I., tekhn.red.

[Thermal analysis of marine steam- and gas- turbine units]  
Teplovye raschety sudovykh parovykh i gazovykh turboagregatov.  
Leningrad, Gos.soyuznoe izd-vo sudostroitel.promyshl., 1960.  
814 p. (MIRA 14:3)  
(Marine turbines)

ZAYTSEV, Yuriy Ivanovich; VASIL'YEV, V.K., doktor tekhn. nauk,  
prof. retsenzent; IPATENKO, A.Ye., kand. tekhn. nauk  
dots., retsenzent; BERG, V.E., inzh., retsenzent;  
ZAKHAROV, A.M., kand. tekhn. nauk, dots., retsenzent;  
KHRYAPCHENKOV, A.S., kand. tekhn. nauk, dots., retsenzent;  
MOISEYEV, A.A., nauchn. red.; SHAURAK, Ye.N., red.

[Fundamentals of the design of marine steam turbines] Os-  
novy proektirovaniya sudovykh parovykh turboagregatov. Le-  
ningrad, Sudostroenie, 1965. 495 p. (MIRA 18:12)

FRUMKIN, Boris Solomonovich; REBROV, B.V., kand. tekhn. nauk,  
dots., retsenzent; VASIL'YEV, V.K., nauchn. red.;  
SHAURAK, Ye.N., red.

[Diagram TSJ for the calculation of marine gas turbines]  
Diagramma TSJ dlia rascheta sudovykh gazoturbinnnykh usta-  
novok. Leningrad, Sudostroenie, 1965. 62 p.  
(MIRA 18:8)

L 39048-66 ENT(1)/EWT(m)/EWP(f)/T WN/DJ

ACC NR: AP6021720

(A,N)

SOURCE CODE: UR/0229/66/000/005/0032/0033

AUTHOR: Kan, A. V.; Vasil'yev, V. K.

ORG: None

TITLE: Using rotary compressors in marine refrigeration units

SOURCE: Sudostroyeniye, no. 5, 1966, 32-33

TOPIC TAGS: marine equipment, refrigeration equipment, gas compressor, compressor rotor, ammonia

ABSTRACT: The authors describe rotary compressors made by the Swedish firm Stal for use in marine refrigeration plants. These compressors require little space and have a high motor capacity and broad control range. A diagram is given showing the compressor and its components. The rotary compressor consists of two basic parts: two spiral bladed rotors mounted in a single housing. The driving rotor has 4 blades and the driven rotor has 6. The blades interlock like gears during rotation. The clearance between the blades of both rotors does not exceed 0.1 mm. Sealing bands are provided along the edge of each blade. Rotation of the driven rotor is accomplished by synchronizing gears. Compressor operations can be divided into three phases: intake, compression and forcing. Gas enters the main housing through the intake and

UDC: 621.665:621.57

Card 1/2

L 39048-66

ACC NR: AP6021720

fills the nearest cavities between the blades during the rotation of the rotor. These filled cavities extend along the rotor to the forcing chamber during rotation. When the entire space between the blades is filled with gas the inlet is closed completing the intake phase. As rotation of the rotor continues the space filled with gas is reduced and gas pressure increases. Thus at a definite position of the rotor the compressed gas reaches the forcing section and then leaves the compressor casing. Oil injection is used both for sealing and for cooling the compressed gases. These compressors are now being used on trawlers at an operating speed of 2950 rpm. They are equipped with automatic controls for power regulation from 10 to 100%. These compressors can use freon 22, freon 12 and ammonia. So far, the function has been to act as booster compressors for ammonia. Oil has to be changed after 20,000 hours of operation and bearings after 40,000. Orig. art. has: 3 figures.

SUB CODE: 13/ SUBM DATE: none

Card 2/27/49

ACC NR: AT6036516

SOURCE CODE: UR/0000/66/000/000/0094/0095

AUTHOR: Vasil'yev, V. K.; Gorbov, F. D.; Novikov, M. A.; Savvin, A. B.; Tambiyev, Ye. Z.

ORG: none

TITLE: Investigation of the possibility of creating a conflict situation during interdependent cooperative pilot teamwork by means of mathematical modeling [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966.]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 94-95

TOPIC TAGS: mathematical model, group dynamics, space psychology, cosmonaut training, homeostasis

ABSTRACT: In recent years the "man-machine" problem has commanded increasing attention. Two trends have emerged from investigations devoted to this problem: the first involves a study of a possible optimum relationship between the operator and the machine; and the second considers the solution to mission-oriented problems by the operator. The majority of experiments have been devoted to the characteristics of one operator inter-

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ACC NR: AT6036516

acting with a mechanical system. However, the operator teamwork is of special interest.

The "homeostat" device makes it possible to conduct experimental tests on an operator participating in a team and receive quantitative data which can be used to construct a mathematical model of their interdependent activity.

Present information indicates that during the solution of "difficult" problems on the homeostat, there is a division of responsibility among the operators necessary for fulfilling the mission. Therefore, the possibility exists of constructing a heuristic model from experimental data by considering the differentiated nature of different operator tasks in one group or another.

Two approaches to studying operator tactics on the homeostat can be demonstrated; a) operator performance in a nonconflicting situation where the problem can be solved; b) operator performance in a conflicting situation where the problem cannot be solved. The latter approach is of special interest in selecting special, mission-oriented groups (space-flight teams, expeditionary groups etc.).

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ACC NR: AT6036516

A mathematical model was constructed reflecting the operation of the homeostat in standard regime (static model). Based on this model, it is possible to select exchange-coefficient values corresponding to a predetermined conflicting or nonconflicting situation. Some data have been obtained on the dynamic characteristics of operators during teamwork.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 05, 06 / SUBM DATE: 00May66

Card 3/3

ACC NR: AT6036517

SOURCE CODE: UR/0000/66/000/000/0095/0096

AUTHOR: Vasil'yov, V. K.; Katkovsky, B. S.; Savvin, A. B.

ORG: none

TITLE: Mathematical modeling of the organism's 0 sub 2 requirement while performing physical work [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966.]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 95-96

TOPIC TAGS: mathematical model, oxygen consumption, biologic metabolism, biologic respiration

ABSTRACT: A mathematical model of a biological object can be constructed in a number of ways, one of which entails composing equations of relationships for individual elements in a system on the basis of physical, physical chemical, biochemical, and other laws. Here, the laws of biology and medicine provide a background. Another method involves analysis of input variables (affectors) and output variables (reactions) of a system. On the basis of such an analysis, a formal mathematical model can be arrived at which establishes a correlation between the input and output of a biological object. This method,

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ACC NR: AT6036517

used for the quantitative appraisal of the oxygen regimen of an organism.  
Upon further perfection, this model can be used to rate the general physical  
condition of the human organism under actual spaceflight conditions and as  
a basis for life support requirements. / [V. A. No. 22; AID Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

LIBENSON, V.S.; BRAUDE, V.I.; CHERNYSHEV, V.F.; VASIL'YEV, V.K.

Latent tubercular infection in white mice. Biol. eksp. biol. i med.  
58 no.10:47-49 0 '64. (MIRA 18:12)

1. Otdeleniye eksperimental'noy patologii i terapii (zav. -  
doktor med.nauk I.M.Bondarev) Moskovskogo nauchno-issledovatel'-  
skogo instituta tuberkuleza (dir. - kand.med.nauk T.P.Mochalova)  
Ministerstva zdravookhraneniya RSFSR. Submitted April 6, 1963.

VASIL'YEV, Vladimir Konstantinovich; SHOR, Matvey Iosifovich; SHAMSHEV, Leonid Petrovich; IOFIS, Ye.A., kand.tekhn.nauk, red.; ZHER-DETSKAYA, N.N., red.; MALEK, Z.N., tekhn.red.

[Negative and positive photographic materials] Negativnye i pozitivnye fotomaterialy. Izd.2-e, ispr.1 dop. Pod red. E.A.Iofisa. Moskva, Gos.izd-vo "Iskusstvo," 1959. 114 p. (Biblioteka foto-liubitelia, no.2).

(Photography--Equipment and supplies)

VASIL'YEV, V.K.; PANKOVA, A.A.

Result of a study of dihydrostreptomycin paraaminosalicylate  
activity in vitro and in vivo. Antibiotiki 6 no.5:390-392 My  
'61. (MIRA 14:7)

1. Otdeleniye eksperimental'noy patologii i terapii (zav. V.F.  
Chernyshev) Instituta tuberkuleza Ministerstva zdavookhraneniya  
RSFSR.

(SALICYLIC ACID)

(STREPTOMYCIN)

BULGAKOV, Konstantin Vasil'yevich; VASIL'YEV, V.K., doktor tekhn.  
nauk, prof., retsenzent; KAPLUN, G.B., inzh., red.;  
ZHITNIKOVA, O.S., tekhn. red.

[Utilization of secondary power resources] Ispol'zovanie  
vtorichnykh energeticheskikh resursov. Moskva, Gosenergo-  
izdat, 1963. 183 p. (MIRA 16:7)  
(Power resources)

KOPERIN, Vladislav Vladimirovich; VASIL'YEV, Vladimir Konstantinovich;  
KORELIN, D.S., nauchnyy red.; VDOVENKO, Z.I., red. izd-va;  
MOLCHALINA, Z.S., tekhn. red.

[Manufacture and assembly of industrial metal structures] Izgotovlenie i montazh tekhnologicheskikh metallokonstruktsii. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1962. 210 p. (MIRA 15:3)

(Structural frames)



VASIL'YEV, V. K.

Tekhnicheskii kontrol' v sudostroenii [Technical control in shipbuilding].  
Leningrad, Sudpromgiz, 1952. 180 p.

SO: Monthly List of Russian Accessions, Vol 6 No 4, July 1953

VASIL'YEV, V.K.

Self-cementing butts for precast reinforced-concrete construction  
elements. Suggested by V.K.Vasil'ev.. Rats.i izobr.predl.v stroi.  
no.16:21-26 '60. (MIRA 13:9)

1. Po materialam Kaluzhskogo Oblproyekta.  
(Precast concrete construction)

VASIL'YEV, V.K.; SHOR, M.I.; SHAMSHEV, L.P.; IOSIF, Ye.A., kandidat  
tekhnicheskikh nauk, redaktor; ZHERDITSKAYA, N.N., redaktor;  
PANKRATOVA, M.A., tekhnicheskii redaktor.

[Negative and positive photographic material] Negativnye i  
pozitivnye fotomaterialy. Pod red. Ye.A.Iosifa. Moskva, Gos.  
izd-vo "Iskusstvo." (Biblioteka fotoliubitelia no.2) 1955.  
100 p. (MLRA 8:11)  
(Photography--Appratus and supplies)

ALYAMOVSKIY, Mikhail Ivanovich; PROMYSLOV, Aleksandr Aleksandrovich;  
VASIL'YEV, V.K., doktor tekhn. nauk, prof., retsenzent;  
AGAFONOV, V.A., kand. tekhn. nauk, retsenzent; KUTATELADZE,  
S.S., nauchnyy red.; VLASOVA, Z.V., red.; KRYAKOVA, D.M.,  
tekhn. red.

[Marine condenser plants] Sudovye kondensatsionnye ustanovki. Le-  
ningrad, Sudpromgiz, 1962. 401 p. (MIRA 15:9)  
(Condensers (Steam)) (Marine engineering)

VASIL'YEV, V.K.

Results of the study of the antituberculous activity of streptosahuzide  
in experiments conducted in vitro and in vivo. Antibiotiki 6 no.12:  
1091-1096 D '61. (MIRA 15:2)

1. Otdeloniye eksperimental'noy patologii i terapii (zav. V.F.  
Chernyshev) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza.  
(SALUZIDE) (TUBERCULOSIS)

VASIL'YEV, V.K.; LAZAREVA, Ye.N.; POCHAPINSKIY, V.I.

Effect of some components of ointment bases on the penetration of  
chlortetracycline through intact skin in rabbits. Antibiotiki 10  
no.5:442-445 My '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
Moskva.

ACAFONOV, Vladimir Andreyevich [deceased]; YEREMILOV, Valentin  
Georgiyevich; PANKOV, Yevgeniy Vasil'yevich; VASIL'YEV,  
V.K., doktor tekhn. nauk, prof., retsenzent; KUTATELADZE,  
S.S., doktor tekhn. nauk, prof., retsenzent; SERDYUKOV, S.A.,  
nauchn. red.; SMIRNOV, Yu.I., red.; CHISTYAKOVA, R.K., tekhn.  
red.  
[Marine condenser plants] Sudovye kondensatsionnye ustanovki.  
Leningrad, Sudpromgiz. 1963. 489 p. (MIRA 16:12)  
(Marine engineering) (Condensers (Steam))

YOSIL, V. L.

Cultivation of vegetables seed. Leningrad?. Leningradskoe gazetno-zhurnal'noe i  
knizhnoe izd.-vo, 1950. 187 p.



VASIL'YEV, V.L.

[Spicy vegetables; parsley, celery, parsnip, dill] Prianye  
ovoshchi; petrushka, sel'derei, pasternak, ukrop. Moskva, Gos.  
izd-vo selkhoz lit-ry, 1955. 50 p. (MLRA 9:9)  
(Vegetables) (Spices)

VASIL'YEV, V.L.; GOL'DENBERG, A.A.; AVENIROV, S.P., otv. red.;  
OSVENSKAYA, A.A., red.; FRUMKIN, P.S., tekhn. red.

[Technical control in shipbuilding] Tekhnicheskii kontrol' v  
sudostroenii. Leningrad, Sudpromgiz, 1952. 178 p.  
(MIRA 16:7)

(Shipbuilding)

ALEKSANDROV, Sergey Vasil'yevich, kandidat sel'skokhozyaystvennykh nauk;  
BELYAYEV, Anton Semenovich; VASIL'YEV, Vasil'yuk'yanovich, kandidat  
sel'skokhozyaystvennykh nauk; KAZAKOVA, Antonina Alekseyevna, kandidat  
sel'skokhozyaystvennykh nauk; KAMERAZ, Abram Yakovlevich, kandidat  
sel'skokhozyaystvennykh nauk; SECHKAREV, Boris Ivanovich, kandidat  
sel'skokhozyaystvennykh nauk; BREZHNEV, D.D., professor, doktor  
sel'skokhozyaystvennykh nauk, redaktor; PETROV, N.P., redaktor;  
CHUNAYEVA, Z.V., tekhnicheskiiy redaktor

[Vegetable gardening]Ovoshchevodstvo. Pod red. D.D.Brezhneva. Moskva,  
Gos. izd-vo selkhoz. lit-ry, 1956. 472 p. (MLRA 9:12)  
(Vegetable gardening)

Лазаревич, Виктор

ИП.  
.793114

НА БЕРЕГУ КАХОВСКОГО МОРЯ. МОСКВА, "ФИЗКУЛЬТУРА И СПОРТ", 1956.  
84 н. ИЛИС.

VASIL'YEV, V.M., inzh.

Propeller cone with a fixed part. Sudostroenie 26 no.3 (209):57-  
58 Mr. '60. (MIRA 14:11)

(Propellers)

VASIL'YEV, V.M.

RUSSIAN BOOK INFORMATION

001/5721

Vsesoyuznaya astronomicheskaya konferentsiya.

Trudy 14-y Astronomicheskoy konferentsii SSSR, Kiyev, 27-30 maya 1958 g.  
(Transactions of the 14th Astronomical Conference of the USSR, Held in Kiyev  
27-30 May 1958) Moscow, Izd-vo AN SSSR, 1960. 440 p. Errata slip inserted.  
1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Glavnaya astronomicheskaya observatoriya  
(Pulkovo).

Resp. Ed.: M. S. Zverev, Corresponding Member, Academy of Sciences USSR; Ed. of  
Publishing House: N. K. Zaychik; Tech. Ed.: R. A. Zamarayeva.

PURPOSE: The book is intended for astronomers and astrophysicists, particularly  
those interested in astronomical research.

COVERAGE: This publication presents the Transactions of the 14th Astronomical  
Conference of the USSR, held in Kiyev 27-30 May 1958. It includes 27 reports  
and 55 scientific papers presented at the plenary meeting of the Conference

Card 2/56

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SOV/5721

Transactions of the 14th Astronomical (Cont.)

and at the special sectional meetings. An appendix contains the resolutions adopted by the Conference, the composition of the committees, the agenda, and the list of participants at the Conference. A brief summary in English is given at the end of each article. References follow individual articles. The Presidium of the Astronomical Committee (Chairman M. S. Zverev), which supervised the preparation of this publication, expresses thanks to the members of the secretariat: V. M. Vasil'yev, I. G. Kol'chinskii, A. B. Onegina, and Kh. I. Potter.

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Address by A. A. Mikhaylov, Chairman of the Astronomical Council of the Academy of Sciences USSR

REPORTS OF THE ASTRONOMICAL COMMITTEE AND SUBCOMMITTEES  
INFORMATION ON ASTRONOMICAL WORK PRESENTED BY VARIOUS INSTITUTIONS

Card 2/16

Transactions of the 14th Astrometrical (Cont.)

80V/5721

Vasil'yev, V. M., and D. D. Polozhentsev. Application of Punch-Card Machines for Calculations Made by the Time Service at the Main Astronomical Observatory	328
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VASIL'YEV, V.M.

The basic theorem of undercutting. Trudy NPI 153:3-12 '64.

Analytical investigation of a spiroid engagement. (MIRA 18:12)  
Ibid.:13-28

S/035/61/000/004/017/058  
AG01/A101

3,1200

AUTHORS: Vasil'yev, V. M., and Polozhentsev, D. D.

TITLE: On application of analytical computers to calculations of time service at the GAO (Main Astronomical Observatory) ✓B

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 4, 1961, 17, abstract 4A210 ("Tr. 14-y Astrometr. konferentsii SSSR, 1958". Moscow-Leningrad, AN SSSR. 1960, 328-331, Engl. summary)

TEXT: This is a report on the calculation procedure of clock corrections by means of analytical computers, which was developed and successfully applied in the computing laboratory of the Pulkovo Observatory. It takes about 25 minutes to compute clock correction from the results of observations of 20 stars, using commutation boards mounted in advance.

G. T.

[Abstracter's note: Complete translation]

Card 1/1

PROKH, L.Z.; VASIL'YEV, V.M.

Visual observations of auroras at the hydrometeorological stations  
of the Ukraine in 1957-1958. Mezhdunar.geofiz.god [Kiev] no.2:62-65 '60.  
(MIRA 14:1)

1. Ukrainian Hydrometeorological Research Institute of the Hydro-  
meteorological Service Administration of the Ukrainian S.S.R.  
(Auroras)

VASIL'YEV, Y.M.; AVILOV, A.A.; ALMAZOV, A.D.; BALASHOV, A.V.; VOLKOV, A.M.;  
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Subject : USSR/Astronomy  
Card 1/1 Pub. 8 - 11/13  
Author : Vasiliev, V. M.  
Title : On the Systematic Error in the Determination of the Inclination of the Axis of a Transit Instrument  
Periodical : Astron. zhur., v. 31-5, 467-482, S-O 1954  
Abstract : Investigates the question of the known difference in the inclinations of the axis  $\angle_{WE} - \angle_{W}$ , dependent on the order of the observations. The daily and seasonal periodicity in this value which depends on the temperature differences in the body of the instrument is established. Six tables, 10 graphs, formulae, 12 references (11 Russian).  
Institution : Main Astron. Observatory, Acad. of Sci., USSR  
Submitted : N 27, 1953